

WHAT IS CLAIMED IS:

1. An optical data medium comprising a substrate that is optionally already coated with one or more reflective layers and on the surface of which have been applied

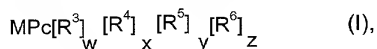
- 5 (1) an information layer that can be recorded on using light, wherein the information layer contains (i) a light-absorbing compound comprising at least one phthalocyanine and (ii) optionally a binder,
- (2) optionally one or more reflective layers, and
- (3) optionally a protective layer or a further substrate or a covering
- 10 layer,

wherein the optical data medium can be recorded on and read using blue light.

2. An optical data medium according to Claim 1 wherein the substrate is transparent.

- 15 3. An optical data medium according to Claim 1 wherein the blue light is provided by a laser light.

4. An optical data medium according to Claim 1 wherein the phthalocyanine dye corresponds to the formula (I)



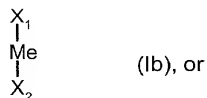
- 20 in which

Pc represents a phthalocyanine,

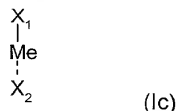
M represents two independent H atoms, a divalent metal atom, a trivalent axially monosubstituted metal atom of the formula (Ia)



- 25 a tetravalent axially disubstituted metal atom of the formula (Ib)



a trivalent axially monosubstituted and axially monocoordinated metal atom of the formula (Ic)



with the proviso that when  $X_1$  or  $X_2$  is a charged ligand, the charge is compensated by an oppositely charged ion,

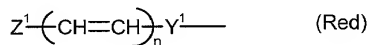
in which

$X^1$  and  $X^2$ , independently of one another, represent halogen, hydroxyl, oxygen, cyano, thiocyanato, cyanato, alkenyl, alkynyl, arylthio, dialkylamino, alkyl, alkoxy, acyloxy, alkylthio, aryl, aryloxy,  $-\text{O}-\text{SO}_2\text{R}^8$ ,  $\text{O}-\text{PR}^{10}\text{R}^{11}$ ,  $-\text{O}-\text{P}(\text{O})\text{R}^{12}\text{R}^{13}$ ,  $-\text{O}-\text{SiR}^{14}\text{R}^{15}\text{R}^{16}$ ,  $\text{NH}_2$ , alkylamino and the radical of a heterocyclic amine,

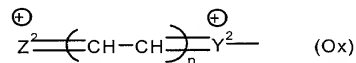
$\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^5$  and  $\text{R}^6$  correspond to substituents of the phthalocyanine and independently of one another, represent halogen, cyano, nitro, alkyl, aryl, alkylamino, dialkylamino, alkoxy, alkylthio, aryloxy, arylthio,  $\text{SO}_3\text{H}$ ,  $\text{SO}_2\text{NR}^1\text{R}^2$ ,  $\text{CO}_2\text{R}^9$ ,  $\text{CONR}^1\text{R}^2$ ,  $\text{NH}-\text{COR}^7$ , or a radical of the formula  $-(\text{B})_m-\text{D}$ , in which

B denotes a bridge member selected from the group consisting of a direct bond,  $\text{CH}_2$ , CO,  $\text{CH}(\text{alkyl})$ ,  $\text{C}(\text{alkyl})_2$ , NH, S, O, or  $-\text{CH}=\text{CH}-$ , such that  $(\text{B})_m$  denotes a chemically reasonable sequence of bridge members B with  $m = 1$  to 10, and

D represents the monovalent radical of a redox system of the formula



or



or represents a metallocenyl radical or metallocenylcarbonyl radical, wherein  $Z^1$  and  $Z^2$ , independently of one another, represent  $NR'R''$ ,  $OR''$ , or  $SR''$ ,

$Y^1$  represents  $NR'$ , O, or S,

5  $Y^2$  represents  $NR'$ ,

$n$  represents 1 to 10, and

$R'$  and  $R''$ , independently of one another, represent hydrogen, alkyl, cycloalkyl, aryl or hetaryl, or form a direct bond or a bridge to one of the C atoms of the

10  $-(CH=CH)_n-$  or  $-(CH-CH)_n-$  chain,

w, x, y and z, independently of one another, represent 0 to 4 and the sum  $w+x+y+z$  is  $\leq 16$ ,

$R^1$  and  $R^2$ , independently of one another, represent hydrogen, alkyl, hydroxyalkyl, or aryl, or  $R^1$  and  $R^2$ , together with the N atom to which they are bonded, form a heterocyclic 5-, 6-, or 7-membered ring, optionally with participation of further hetero atoms, and

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$R^7$  and  $R^{16}$ , independently of one another, represent alkyl, aryl, hetaryl, or hydrogen.

5. An optical data medium according to Claim 4 wherein M

20 represents

- (1) two independent H atoms or a divalent metal atom selected from the group consisting of Cu, Ni, Zn, Pd, Pt, Fe, Mn, Mg, Co, Ru, Ti, Be, Ca, Ba, Cd, Hg, Pb, and Sn,
- (2) a trivalent axially monosubstituted metal atom of the formula (Ia) in which Me represents Al, Ga, Ti, In, Fe, or Mn, or
- 25 (3) a tetravalent metal atom of the formula (Ib) in which Me represents Si, Ge, Sn, Zn, Cr, Ti, Co, or V.

6. An optical data medium according to Claim 4 wherein  
M represents a radical of the Formula (Ia) in which Me represents Al,  
X<sub>1</sub> and X<sub>2</sub> represent halogen, aryloxy, or alkoxy, and  
w, x, y, and z each represent 0.
- 5 7. An optical data medium according to Claim 4 wherein  
M represents a radical of the Formula (Ib) in which Me represents Si,  
X<sub>1</sub> and X<sub>2</sub> represent halogen, aryloxy, or alkoxy, and  
w, x, y, and z each represent 0.
8. A process for the production of the optical data medium  
10 according to Claim 1 comprising coating a substrate that is optionally  
already coated with a reflective layer with a phthalocyanine dye, optionally  
in combination with suitable binders and additives and optionally suitable  
solvents, and optionally providing the substrate with a reflective layer,  
further intermediate layers, and optionally a protective layer or a further  
15 substrate or a covering layer.
9. A process for the production of the optical data media  
according to Claim 8 wherein the coating with the phthalocyanine dye is  
effected by spin-coating, sputtering, or vapor deposition.
10. An optical data medium having a recordable information  
20 layer, wherein the optical data medium is obtained by recording on an  
optical data medium according to Claim 1 using blue light.
11. An optical data medium having a recordable information  
layer, wherein the optical data medium is obtained by recording on an  
optical data medium according to Claim 1 using a laser light having a  
25 wavelength of 360 to 460 nm.